IN THE CLAIMS:

Please cancel Claim 17 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 1, 3, 5-8 and 18 as follows.

1. (Currently Amended) A diffractive optical element, comprising:

~~a grating structure having~~ a periodic first blazed type grating portion and a periodic second blazed type grating portion which is arranged on a light exit side of the first blazed type grating portion, wherein

the first blazed type grating portion and the second blazed type grating portion are each formed by a plurality of grating sections, and a pair of grating sections corresponding to each other in each periodic first and second blazed type grating portions has the same period Pt, and

~~in~~ each of the grating sections forming at least one of the first blazed type grating portion and the second blazed type grating portion ~~having a period larger than a used wavelength, period grating section structures smaller than a the used wavelength are arranged in a periodic manner~~ is formed by a sub-wavelength structured grating having a period pl smaller than the period Pt,

with the period pl being smaller than a wavelength of a light beam used.

2. (Original) A diffractive optical element according to claim 1, wherein said diffractive optical element is structured such that within an entire region of used

wavelengths, diffraction directions are made different from each other, depending upon a polarization direction of a light beam incident on said diffractive optical element, and a diffracted light is concentrated only to one predetermined diffraction order.

3. (Currently Amended) A diffractive optical element according to claim 1, wherein said ~~minute periodic structure~~ sub-wavelength structure grating is constituted by one kind of material, or two kinds of materials, and occupation ratios of the respective materials within one period of said ~~minute periodic structure~~ sub-wavelength structure grating are made different from each other along a periodic direction of said grating portion.

4. (Original) A diffractive optical element according to claim 1, wherein said diffractive optical element has a step-shaped grating portion.

5. (Currently Amended) A diffractive optical element according to claim 4, wherein said ~~minute periodic structure~~ sub-wavelength structured grating of said grating portion is varied along a periodic direction of said grating portion.

6. (Currently Amended) A diffractive optical element according to claim 5, wherein said ~~minute periodic structure~~ sub-wavelength structured grating varied along the periodic direction of said grating portion is varied every step of said step-shaped grating portions.

7. (Currently Amended) A diffractive optical element according to claim 4, wherein said ~~minute periodic structure~~ sub-wavelength structured grating of said grating portion is varied in a grating thickness direction.

8. (Currently Amended) A diffractive optical element according to claim 7, wherein said ~~minute periodic structure~~ sub-wavelength structured grating varied in the grating thickness direction is varied every step of said step-shaped grating portion.

9. (Original) A diffractive optical element according to claim 1, wherein said used wavelength range corresponds to a visible light range.

10. (Previously Presented) A polarization converting element, comprising deflecting means provided so that an emergence direction of one of a P-polarized light beam and an S-polarized light beam which has undergone polarization-separation to be diffracted in a diffraction direction different depending on a polarization direction by said diffractive optical element according to claim 2 is made substantially coincident with an emergence direction of the other beam.

11. (Previously Presented) A polarization converting element, comprising a half-wave plate provided in correspondence to one of a P-polarized light beam and an S-polarized light beam, which has undergone polarization-separation to be diffracted in a direction different depending upon polarization direction, by said diffractive optical element according to claim 2.

12. (Previously Presented) A polarization converting element, comprising deflecting means provided so that an emergence direction of one of a P-polarized light beam and an S-polarized light beam which has undergone polarization-separation to be diffracted in a diffraction direction different depending on a polarization direction by said diffractive optical element according to claim 2 is made substantially coincident with an emergence direction of the other beam and a half-wave plate is provided in correspondence to one of the P-polarized light beam and S-polarized light beam.

13. (Previously Presented) A polarization converting element according to any one of claims 10 to 12, further comprising an optical member provided so that an incident direction of a light beam on said diffractive optical element is made substantially parallel to an emergence direction thereof.

14. (Original) A projection type display apparatus, in which a light beam which is emitted from a light source unit and contains an S-polarized light component and a P-polarized light component, is guided using the polarization converting element according to any one of claims 10 to 12 toward modulating means for modulating the light beam on the basis of an image signal and the light beam modulated by said modulating means is projected onto a predetermined surface by a projection optical system.

15. (Original) A projection type display apparatus according to claim 14, wherein said image signal is controlled in response to a signal supplied from an image processing means.

16. (Previously Presented) A diffractive optical element according to claim 1, wherein corresponding grating sections of said first and second blazed type grating portions have the same period.

Claim 17. (Cancelled).

18. (Currently Amended) A diffractive optical element according to claim 1, wherein the ~~periodic structure~~ sub-wavelength structured gating, having a period smaller than the ~~used~~ wavelength of the light beam used, is a rib-like sub-wavelength structure of various depth.